UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

26263

7590

05/14/2009

SONNENSCHEIN NATH & ROSENTHAL LLP P.O. BOX 061080 WACKER DRIVE STATION, SEARS TOWER CHICAGO, IL 60606-1080 EXAMINER

KURR, JASON RICHARD

ART UNIT PAPER NUMBER

2614

DATE MAILED: 05/14/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,175	05/05/2005	Shiro Suzuki	09792909-6226	9989

TITLE OF INVENTION: APPARATUS AND METHOD FOR DRIVING A DISPLAY PANEL

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/14/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

appropriate. All further indicated unless correct maintenance fee notifica	correspondence including ted below or directed other ations.	ng the Patent, advance of herwise in Block 1, by (a					correspondence address as arate "FEE ADDRESS" for
CURRENT CORRESPOND	DENCE ADDRESS (Note: Use Bi	Feet	s) Transmittal. Thi	is certif I paper	icate cannot be used f	or domestic mailings of the for any other accompanying ant or formal drawing, must	
26263	7590 05/14	/2009	nuv			of Mailing or Trans	miceian
SONNENSCHEIN NATH & ROSENTHAL LLP P.O. BOX 061080 WACKER DRIVE STATION, SEARS TOWER			I he Stat addı tran	reby certify that thes Postal Service weeksed to the Mailsmitted to the USP	is Fee(s vith suf Stop TO (57	s) Transmittal is being ficient postage for fir ISSUE FEE address 1) 273-2885, on the d	g deposited with the United st class mail in an envelope above, or being facsimile late indicated below.
CHICAGO, IL 6	50606-1080						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO:	RNEY DOCKET NO.	CONFIRMATION NO.
10/534,175	05/05/2005	•	Shiro Suzuki		0	9792909-6226	9989
TITLE OF INVENTION	N: APPARATUS AND M	ETHOD FOR DRIVING	A DISPLAY PANEL				
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	08/14/2009
EXAM	MINER	ART UNIT	CLASS-SUBCLASS				
KURR, JASC	ON RICHARD	2614	381-022000				
 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 			(1) the names of up to or agents OR, alternative (2) the name of a single registered attorney or a second control of the contr	a single firm (having as a member a ey or agent) and the names of up to nt attorneys or agents. If no name is			
PLEASE NOTE: Un recordation as set fort (A) NAME OF ASSI	less an assignee is ident th in 37 CFR 3.11. Comp GNEE	ified below, no assignee oletion of this form is NO	T a substitute for filing an (B) RESIDENCE: (CITY	atent. If an assign assignment. and STATE OR C	COUNT	'RY)	ocument has been filed for
Please check the appropr	riate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🖵 Co	orporati	on or other private gro	oup entity Government
4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			o. Payment of Fee(s): (Plean A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	ched. required fee(s), any de	
a. Applicant claim	atus (from status indicated as SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no lon	-			
NOTE: The Issue Fee an interest as shown by the	nd Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regi	istered a	attorney or agent; or th	ne assignee or other party in
Authorized Signature				Date			
Typed or printed name				-			
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	ntiality is governed by 35 dapplication form to the ions for reducing this bu. Virginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th ONOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by t imated to take 12 i idual case. Any co er, U.S. Patent and D THIS ADDRESS	he publ minutes omment Traden S. SENI	ic which is to file (and to complete, including son the amount of the transfer, U.S. Deporto: Commissioner	d by the USPTO to process' ng gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,175	05/05/2005	Shiro Suzuki	09792909-6226	9989
26263 75	590 05/14/2009		EXAM	INER
SONNENSCHEI	N NATH & ROSEN	KURR, JASON RICHARD		
P.O. BOX 061080		ART UNIT	PAPER NUMBER	
WACKER DRIVE CHICAGO, IL 606	STATION, SEARS T 506-1080	2614 DATE MAILED: 05/14/200	0	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 771 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 771 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)				
	10/534,175	SUZUKI ET AL.				
Notice of Allowability	Examiner	Art Unit				
	JASON R. KURR	2614				
The MAILING DATE of this communication appeal all claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R	(OR REMAINS) CLOSED or other appropriate comm IGHTS. This application is and MPEP 1308.	in this application. If not included nunication will be mailed in due course. THIS subject to withdrawal from issue at the initiative				
1. This communication is responsive to <u>Applicant's amendment</u>	ent dated January 26, 2009					
2. X The allowed claim(s) is/are <u>1-3,5,6,8,12 and 14-18</u> .						
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). 	be been received. been received in Applicati	on No				
* Certified copies not received:						
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirements				
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give						
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.					
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached						
1) hereto or 2) to Paper No./Mail Date						
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date						
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t						
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT						
 Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO/SB/08),	6. ☐ Interview S Paper No 7. ☑ Examiner's	nformal Patent Application Summary (PTO-413), ./Mail Date s Amendment/Comment s Statement of Reasons for Allowance				

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Day on May 11, 2009.

Claims 8 and 18 have been amended to include wherein the computer usable medium is a "computer usable recording medium".

Claims 8 and 18 now read:

-- A computer program product, comprising a computer usable recording medium having a computer readable program code embodied therein, ...--

Allowable Subject Matter

Claims 1-3, 5-6, 8, 12 and 14-18 are allowed. For the purposes of allowance, the original numbering of the claims has been changed.

The following is a statement of reasons for the indication of allowable subject matter:

The general concept of encoding and decoding audio signals wherein a noise component is determined and generated was well known in the art at the time of the

Art Unit: 2614

invention as evidenced by Chen et al (US 7,027,982 B2). However the Examiner has not found prior art that teaches or suggests the modification of Chen in order to provide an apparatus that determines a white-noise level then generates a first index by quantizing the white noise level in the audio signal and generates a second index designating a start location of a random number table adapted to generate a whitenoise component in a decoding side, as defined in the independent claims 1, 6 and 8. The Examiner has also not found prior art that teaches a decoding side that generates a white-noise component based on a first encoded index indicating the energy level of the white-noise component and a second encoded index designating a start location of a random number table, as defined in the independent claims 12, 17 and 18. Other prior art has been cited herein regarding encoding and decoding of noise signals, however the other prior art of record also fails to teach or provide suggestion to arrive the combination of the elements and steps presented in the independent claims, again when said elements or steps are collectively considered in regards to each claim. For at least the reasons listed above, the dependent claims are also allowed in view of their respective dependencies upon the independent claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tsushima et al (US 6,922,667 B2) discloses an encoding apparatus and decoding apparatus.

Application/Control Number: 10/534,175 Page 4

Art Unit: 2614

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON R. KURR whose telephone number is (571)272-0552. The examiner can normally be reached on M-F 10:00am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 273-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason R Kurr/ Examiner, Art Unit 2614

/Vivian Chin/ Supervisory Patent Examiner, Art Unit 2614